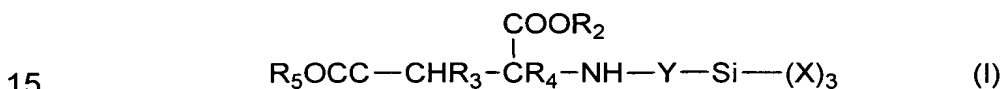


WHAT IS CLAIMED IS:

1. A moisture-curable, alkoxy silane-functional polyether urethane comprising

- 5 a) 20 to 90% by weight, based on the weight of a) and b), of a polyether urethane containing two or more reactive silane groups and one or more polyether segments, wherein the polyether segments have a number average molecular weight of at least 3000 and a degree of unsaturation of 0.007 milliequivalents/g or less, provided that the sum of the number average molecular
- 10 weights of all of the polyether segments per molecule averages 6000 to 20,000, and wherein the reactive silane groups are incorporated as the reaction product of an isocyanate group with a compound corresponding to the formula



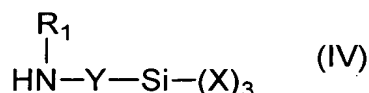
wherein

- X represents identical or different organic groups which are inert to isocyanate groups below 100°C, provided that at least two of these groups are alkoxy or acyloxy groups,
- 20 Y represents a linear or branched alkylene group containing 1 to 8 carbon atoms,
- R₂ and R₅ are identical or different and represent organic groups which are inert to isocyanate groups at a temperature of 100°C or less and
- 25 R₃ and R₄ are identical or different and represent hydrogen or organic groups which are inert towards isocyanate groups at a temperature of 100°C or less, and
- b) 10 to 80% by weight, based on the weight of a) and b), of a
- 30 polyether urethane containing one reactive silane group and one or

more polyether segments having a number average molecular weight of 1000 to 15,000 and a degree of unsaturation of 0.007 milliequivalents/g or less.

2. The polyether urethane of Claim 1 wherein
- 5 X represents identical or different alkoxy groups having 1 to 4 carbon atoms,
- Y represents a linear radical containing 2 to 4 carbon atoms or a branched radical containing 5 to 6 carbon atoms,
- R₂ and R₅ are identical or different and represent alkyl groups having
- 10 1 to 4 carbon atoms and
- R₃ and R₄ represent hydrogen.

3. The polyether urethane of Claim 1 wherein the reactive silane groups of component b) are incorporated as the reaction product of an isocyanate group and a compound corresponding to the formula

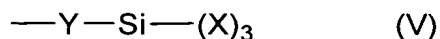


15

wherein

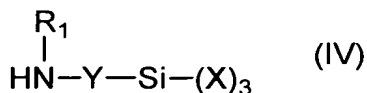
R₁ represents an organic group which is inert to isocyanate groups at a temperature of 100°C or less or a group corresponding to formula V

20



4. The polyether urethane of Claim 2 wherein the reactive silane groups of component b) are incorporated as the reaction product of an isocyanate group and a compound corresponding to the formula

25



wherein

R₁ represents an alkyl, cycloalkyl or aromatic group having 1 to 12 carbon atoms.

5 5. The polyether urethane of Claim 1 wherein the reactive silane groups of component b) are incorporated as the reaction product of an isocyanate group and a compound corresponding to formula I.

6. The polyether urethane of Claim 2 wherein the reactive silane groups of component b) are incorporated as the reaction product of an isocyanate group and a compound corresponding to formula I.

10 7. The polyether urethane of Claim 1 wherein polyether urethane a) is present in an amount of 30 to 80% by weight and polyether urethane b) is present in an amount of 20 to 70% by weight, wherein the percentages are based on the weight of a) and b).

15 8. The polyether urethane of Claim 2 wherein polyether urethane a) is present in an amount of 30 to 80% by weight and polyether urethane b) is present in an amount of 20 to 70% by weight, wherein the percentages are based on the weight of a) and b).

20 9. The polyether urethane of Claim 3 wherein polyether urethane a) is present in an amount of 30 to 80% by weight and polyether urethane b) is present in an amount of 20 to 70% by weight, wherein the percentages are based on the weight of a) and b).

25 10. The polyether urethane of Claim 4 wherein polyether urethane a) is present in an amount of 30 to 80% by weight and polyether urethane b) is present in an amount of 20 to 70% by weight, wherein the percentages are based on the weight of a) and b).

11. The polyether urethane of Claim 5 wherein polyether urethane a) is present in an amount of 30 to 80% by weight and polyether urethane b) is present in an amount of 20 to 70% by weight, wherein the percentages are based on the weight of a) and b).

30 12. The polyether urethane of Claim 6 wherein polyether urethane a) is present in an amount of 30 to 80% by weight and polyether

urethane b) is present in an amount of 20 to 70% by weight, wherein the percentages are based on the weight of a) and b).

13. The polyether urethane of Claim 1 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

14. The polyether urethane of Claim 2 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

15. The polyether urethane of Claim 3 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

16. The polyether urethane of Claim 4 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

17. The polyether urethane of Claim 5 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

18. The polyether urethane of Claim 6 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

19. The polyether urethane of Claim 7 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

20. The polyether urethane of Claim 8 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

5 21. The polyether urethane of Claim 9 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

10 22. The polyether urethane of Claim 10 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

15 23. The polyether urethane of Claim 11 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

20 24. The polyether urethane of Claim 12 wherein the polyether segments of polyether urethane a) have a number average molecular weight of at least 6000 and the polyether segments of component b) have a number average molecular weight of 3000 to 12,000.

25. A sealant, adhesive or coating composition containing the moisture-curable, alkoxysilane-functional polyether urethane of Claim 1.